Bruhath Bengaluru Mahanagara Palike

Name of work:Improvements To Roads And Drains at Someshwara Nagara in Ward No.0

Estimated Cost:202.00 Lakh

Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
1	KSRRB 300-3 **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil involving , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3 **(Page No. 142/ Item No. 19.1/ PWD SR 2018-19)**								
	RCC drain 3rd phase MIG 4th main road	1	150.00	1.20	1.10	198.00			
	PM layout 3rd cross	1	152.00	1.20	1.10	200.64			
	1st cross	1	86.00	1.20	1.10	113.52			
	PM layout 1st main road	1	128.00	1.20	1.10	168.96			
	PM layout 2nd main road	1	100.00	1.20	1.10	132.00			
	Mathru layout 5th cross	1	250.00	1.20	1.10	330.00			
	Mathru layout A cross	1	197.00	1.20	1.10	260.04			
	Mathru layout B cross	1	156.00	1.20	1.10	205.92			
	Main road	1	210.00	1.20	1.10	277.20			
	someshwaranagara cross	1	310.00	1.20	1.10	409.20			
	Culverts	1	5.00	1.50	1.10	8.25			
	Desilting of drains	1	250.00	0.60	0.70	105.00			
		1	180.00	0.60	0.70	75.60			
		1	235.50	0.60	0.70	98.91			
						2583.28	Cum	207.60	536288.93
	Basic Rate	130.00							
	Loading and Unloading	57.00							
	Lead For 5km	12.80							
	Area Weightage 6%	7.80							
	Data Rate	**207.60**							
2	KSRRB M2100-10 Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications **(P.No-222,I No-27.18 PWD SR 2018-19)**								
	RCC drain 3rd phase MIG 4th main road	1	150.00	1.20	0.15	27.00			
	PM layout 3rd cross	1	152.00	1.20	0.15	27.36			
	1st cross	1	86.00	1.20	0.15	15.48			
	PM layout 1st main road	1	128.00	1.20	0.15	23.04			
	PM layout 2nd main road	1	100.00	1.20	0.15	18.00			
	Mathru layout 5th cross	1	250.00	1.20	0.15	45.00			
	Mathru layout A cross	1	197.00	1.20	0.15	35.46			
	Mathru layout B cross	1	156.00	1.20	0.15	28.08			
	Main road	1	210.00	1.20	0.15	37.80			
	someshwaranagara cross	1	310.00	1.20	0.15	55.80			
	Culverts	1	5.00	1.50	0.15	1.13			
	for cc road								
	3rd phase 4th main road	1	61.00	3.50	0.15	32.03			
	22nd B cross road near TATA instute	1	107.00	3.80	0.15	60.99			
						407.18	Cum	5509.33	2243287.64
	Basic Rate	5115.00							

No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1079.39	Note - (220*490.63/100)-1079.39						
	Add Cement cost as per Issue rate	1161.86	Note - (220*264.06/50)-1161.86						
	Sub Total	**5197.48**							
	Area Weightage 6%	311.85							
	Grand Total	**5509.33**							
3	Providing and laying plain/reinforced cement concrete for side drains **using M20 nominal mix** concrete with OPC at 300 kgs with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200 including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm **(I No-37.59.2,P No-271 PWD SR 2018-19)**								
	for bed								
	RCC drain 3rd phase MIG 4th main road	1	150.00	0.90	0.15	20.25			
	PM layout 3rd cross	1	152.00	0.90	0.15	20.52			
	1st cross	1	86.00	0.90	0.15	11.61			
	PM layout 1st main road	1	128.00	0.90	0.15	17.28			
	PM layout 2nd main road	1	100.00	0.90	0.15	13.50			
	Mathru layout 5th cross	1	250.00	0.90	0.15	33.75			
	Mathru layout A cross	1	197.00	0.90	0.15	26.60			
	Mathru layout B cross	1	156.00	0.90	0.15	21.06			
	Main road	1	210.00	0.90	0.15	28.35			
	someshwaranagara cross	1	310.00	0.90	0.15	41.85			
	Culverts	1	5.00	1.00	0.23	1.15			
	side walls								
	RCC drain 3rd phase MIG 4th main road	2	150.00	0.15	0.75	33.75			
	PM layout 3rd cross	2	152.00	0.15	0.75	34.20			
	1st cross	2	86.00	0.15	0.75	19.35			
	PM layout 1st main road	2	128.00	0.15	0.75	28.80			
	PM layout 2nd main road	2	100.00	0.15	0.70	21.00			
	Mathru layout 5th cross	2	250.00	0.15	0.75	56.25			
	Mathru layout A cross	2	197.00	0.15	0.75	44.33			
	Mathru layout B cross	2	156.00	0.15	0.75	35.10			
	Main road	2	210.00	0.15	0.75	47.25			
	someshwaranagara cross	2	310.00	0.15	0.75	69.75			
	Culverts	2	5.00	0.23	0.80	1.84			
	Basic Rate	6670.00				627.15	Cum	7189.42	4508843.62
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1471.89	Note - (300*490.63/100)-1471.89						
	Add Cement cost as per Issue rate	1584.36	Note - (300*264.06/50)-1584.36						
	Sub Total	**6782.47**							
	Area Weightage 6%	406.95							
	Grand Total	**7189.42**							
4	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications Specification No. KBS 4.6.3 **TMT Bars Fe-500 (I No-28.8.2,P No-229 PWD SR 2018-19)**								

No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
	Consider 65kg/Cum for RCC drain	1	627.15	64.00		40140.00			
						40.14	Tonne	65046.90	2610982.57
	Issued rate	61365.00							
	Area Weightage 6%	3681.90							
	Data Rate	65046.90							
5	Providing and fixing Precast RCC cover slabs of 100 mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift charges,curing and concrtee finished surface on both sides etc,and complete as per the directions of Enginner in charges (Data Rate)								
	RCC drain 3rd phase MIG 4th main road	1	150.00	0.90		135.00			
	PM layout 3rd cross	1	152.00	0.90		136.80			
	1st cross	1	86.00	0.90		77.40			
	PM layout 1st main road	1	128.00	0.90		115.20			
	PM layout 2nd main road	1	100.00	0.90		90.00			
	Mathru layout 5th cross	1	250.00	0.90		225.00			
	Mathru layout A cross	1	197.00	0.90		177.30			
	Mathru layout B cross	1	156.00	0.90		140.40			
	Main road	1	210.00	0.90		189.00			
	someshwaranagara cross	1	310.00	0.90		279.00			
	missing slabs	1	18.00	0.90		16.20			
						1581.30	Sqm	2337.00	3695498.10
	Data Rate	2337.00							
6	KSRRB M200-24 Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications MORTH Specification No 202 (Page No 140 Item no 18.47 of KPWD SR 2018-19)								
	for cc road								
	3rd phase 4th main road	1	61.00	3.50	0.20	42.70			
	22nd B cross road near TATA instute	1	100.00	3.80	0.20	76.00			
						118.26	Cum	965.74	114208.41
	Basic Rate	899.00							
	Lead For 5km	12.80							
	Area Weightage 6%	53.94							
	Data Rate	965.74							
7	KSRRB 300-49 Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications MORTH / Chapter 3 (Page No 146/ Item No 19.55/ PWD SR 2018-19)								
	For Asphalt Road								
	Someshwara nagar 5th cross	2	66.00	1.60		211.20			
	Someshwara nagar 2nd main road	2	65.00	1.80		234.00			
	Someshwara nagar main road	2	175.00	1.50		525.00			
	Someshwara nagar 2nd A cross	2	67.00	1.50		201.00			
	Someshwara nagara 5th A cross road	2	64.00	1.80		230.40			
						1402.20	Sqm	95.40	133769.88
	Basic Rate	90.00							
	Area Weightage 6%	5.40							
	Data Rate	95.40							

No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
8	KSRRB 300-Compaction KSRRB 300-58 Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications MORTH / Chapter 3 (Page No-147 Item no - 19.64 of KPWD SR 2018-19)								
	for cc road								
	3rd phase 4th main road	1	61.00	3.50		213.50			
	22nd B cross road near TATA instute	1	100.00	3.75		375.00			
	Someshwara nagar 5th cross	1	66.00	3.50		231.00			
	Someshwara nagar 2nd main road	1	65.00	3.80		247.00			
	Someshwara nagar main road	1	175.00	3.50		612.50			
	Someshwara nagar 2nd A cross	1	67.00	3.90		261.30			
	Someshwara nagara 5th A cross	1	64.00	3.90		249.60			
						2190.60	Sqm	6.36	13932.22
	Basic Rate	6.00							
	Area Weightage 6%	0.36							
	Data Rate	6.36							
9	KSRRB M400-6.1 Construction of granular sub-base by providing close graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications A Plant Mix Method For Grading II Material (Page No-154 Item no -20.4.2 of KPWD SR 2018-19)								
	For Asphalt Road								
	Someshwara nagar 5th cross	2	66.00	1.60	0.10	21.12			
	Someshwara nagar 2nd main road	2	65.00	1.80	0.10	23.40			
	Someshwara nagar main road	2	175.00	1.50	0.10	52.50			
	Someshwara nagar 2nd A cross	2	67.00	1.50	0.10	20.10			
	Someshwara nagara 5th A cross road	2	64.00	1.80	0.10	23.04			
						140.22	Cum	1994.92	279727.68
	Basic Rate	1882.00							
	Area Weightage 6%	112.92							
	Data Rate	1994.92							
10	KSRRB M400-17 Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve thedesired density complete as per specifications MORTH Specification No. 406 (Page No-158 Item no - 20.18 of KPWD SR 2018-19)								
	For Asphalt Road								
	Someshwara nagar 5th cross	2	66.00	1.60	0.23	48.58			
	Someshwara nagar 2nd main road	2	65.00	1.80	0.23	53.82			
	Someshwara nagar main road	2	175.00	1.50	0.23	120.75			
	Someshwara nagar 2nd A cross	2	67.00	1.50	0.23	46.23			
	Someshwara nagara 5th A cross road	2	64.00	1.90	0.23	55.94			
						325.81	Cum	2001.28	651436.65
	Basic Rate	1888.00							
	Area Weightage 6%	113.28							
	Data Rate	2001.28							

No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
11	Cement concrete pavement Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) (Page No. 175 tem No 22.6.1,PW,P & IWTD SR 2018-19)								
	For CC Road								
	3rd phase 4th main road	1	61.00	3.50	0.15	32.03			
	22nd B cross road near TATA instute	1	107.00	3.80	0.15	60.99			
		1	80.00	3.60	0.15	43.20			
		1	89.00	4.00	0.15	53.40			
		1	77.00	4.20	0.15	48.51			
		1	52.40	3.50	0.15	27.51			
						265.67	Cum	5354.02	1422402.98
	Basic Rate	4916.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1766.27	Note - (360*490.63/100)-1766.27						
	Add Cement cost as per Issue rate	1901.23	Note - (360*264.06/50)-1901.23						
	Sub Total	**5050.96**							
	Area Weightage 6%	303.06							
	Grand Total	**5354.02**							
12	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg/ 1 sqm using mechanical means complete as per specifications MORTH Specification No. 502 (Page No 161 Item no - 21.6 of KPWD SR 2018-19)								
	For Asphalt Road								
	Someshwara nagar 5th cross	2	66.00	1.60		211.20			
	Someshwara nagar 2nd main road	2	65.00	1.80		234.00			
	Someshwara nagar main road	2	175.00	1.50		525.00			
	Someshwara nagar 2nd A cross	2	67.00	1.50		201.00			
	Someshwara nagara 5th A cross road	2	64.00	1.80		230.40			
						1402.20	Sqm	29.68	41617.30
	As per Issue rate	28.00							
	Area Weightage 6%	1.68							
	Grand Total	**29.68**							
13	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr II (50 mm to 75 mm) with 4.5 % VG 30 Bitumen (Page No 160 Item no - 21.17.6 of KPWD SR 2018-19)								
	For Asphalt Road								
	Someshwara nagar 5th cross	2	66.00	1.60	0.05	10.56			
	Someshwara nagar 2nd main road	2	65.00	1.80	0.05	11.70			

No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
	Someshwara nagar main road	2	175.00	1.50	0.05	26.25			
	Someshwara nagar 2nd A cross	2	67.00	1.50	0.05	10.05			
	Someshwara nagara 5th A cross road	2	64.00	1.80	0.05	11.52			
						70.11	Cum	6407.70	449243.85
	As per Issue rate	6045.00							
	Area Weightage 6%	362.70							
	Grand Total	**6407.70**							
14	KSRRB 500-2 Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications MORTH specification clause 501 (Page No-161 Item no -21.2 of KPWD SR 2018-19)								
	For Asphalt Road								
	Someshwara nagar 5th cross	1	66.00	6.00		396.00			
	Someshwara nagar 2nd main road	1	65.00	6.00		390.00			
	Someshwara nagar main road	1	175.00	7.00		1225.00			
	Someshwara nagar 2nd A cross	1	67.00	7.20		482.40			
	Someshwara nagara 5th A cross road	1	64.00	5.90		377.60			
						2870.40	Sqm	5.30	15213.12
	Basic Rate	5.00							
	Area Weightage 6%	0.30							
	Grand Total	**5.30**							
15	KSRRB 500-7 Providing and applying tack coat using 80/100 grade bitumen(VGIO) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH (Page No-161 Item no -21.7 of KPWD SR 2018-19)								
	For Asphalt Road								
	Someshwara nagar 5th cross	1	66.00	6.00		396.00			
	Someshwara nagar 2nd main road	1	65.00	6.00		390.00			
	Someshwara nagar main road	1	175.00	7.00		1225.00			
	Someshwara nagar 2nd A cross	1	67.00	7.20		482.40			
	Someshwara nagara 5th A cross	1	64.00	5.90		377.60			
						2870.40	Sqm	12.72	36511.49
	As per Issue rate	12.00							
	Area Weightage 6%	0.72							
	Grand Total	**12.72**							
16	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 507 of MORTH V revision as per IRC SP-53-2015 using – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (P.No.171, I.No.21.78.12 of PWD BCSR 2018-19)								
	For Asphalt Road								
	Someshwara nagar 5th cross	1	66.00	6.00	0.04	15.84			
	Someshwara nagar 2nd main road	1	65.00	6.00	0.04	15.60			

Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Un		Amount
	Someshawara Nagara Main road	1	175.00	7.00	0.04	49.00			
	1st A Cross from 3rd B Main road	1	67.00	7.20	0.04	19.30			
	2nd A Cross from 3rd B Main road	1	64.00	5.90	0.04	15.10			
						114.82	Cum	7537.66	865443.97
	As per Issue rate	7111.00							
	Area Weightage 6%	426.66							
	Grand Total	7537.66							
17	KSRRB M800-13.Road Marking with Hot Applied ThermoplasticCompound with Reflectrising Glass Beads on Bituminous Surface/Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (P.No.182 & I.No.24.15 PWD 18-19)								
	For Asphalt Road								
	Cross Road from 3rd Main road								
	2nd cross	2	50.00	0.15		15.00			
	3rd cross	2	137.00	0.15		41.10			
	Someshawara Nagara Main road	2	175.00	0.15		52.50			
	1st A Cross from 3rd B Main road	2	67.00	0.15		20.10			
	2nd A Cross from 3rd B Main road	2	64.00	0.15		19.20			
						147.90	Sqm	454.74	67256.05
	As per Issue rate	429.00							
	Area Weightage 6%	25.74							
	Grand Total	454.74							
								Total Construction Cost	17717088.28
								GST Charges 12%	2126050.59
								Towards DPR And PMC Cost 2%	356000.00
								Sub Total	20199138.87
								Utility Shifting,Miscellaneous and Rounding off	861.13
								GRAND TOTAL	20200000.00

Certificate

1) This Work Comes Within BBMP Limits.
2) Certified that personaly Inspected the Work Spot.
3) Certified that the Estimate is Prepared Based on CSR of PWD Bangalore Circle 2018-19 & issued rate Dated. 01/07/2020
4) Estimate is Prepared Making Use of essential itemof work as per site conditions in safest way of Execution in most economical way
5) This work is not include in any other program of work.

Assistant Engineer
Ward No.04

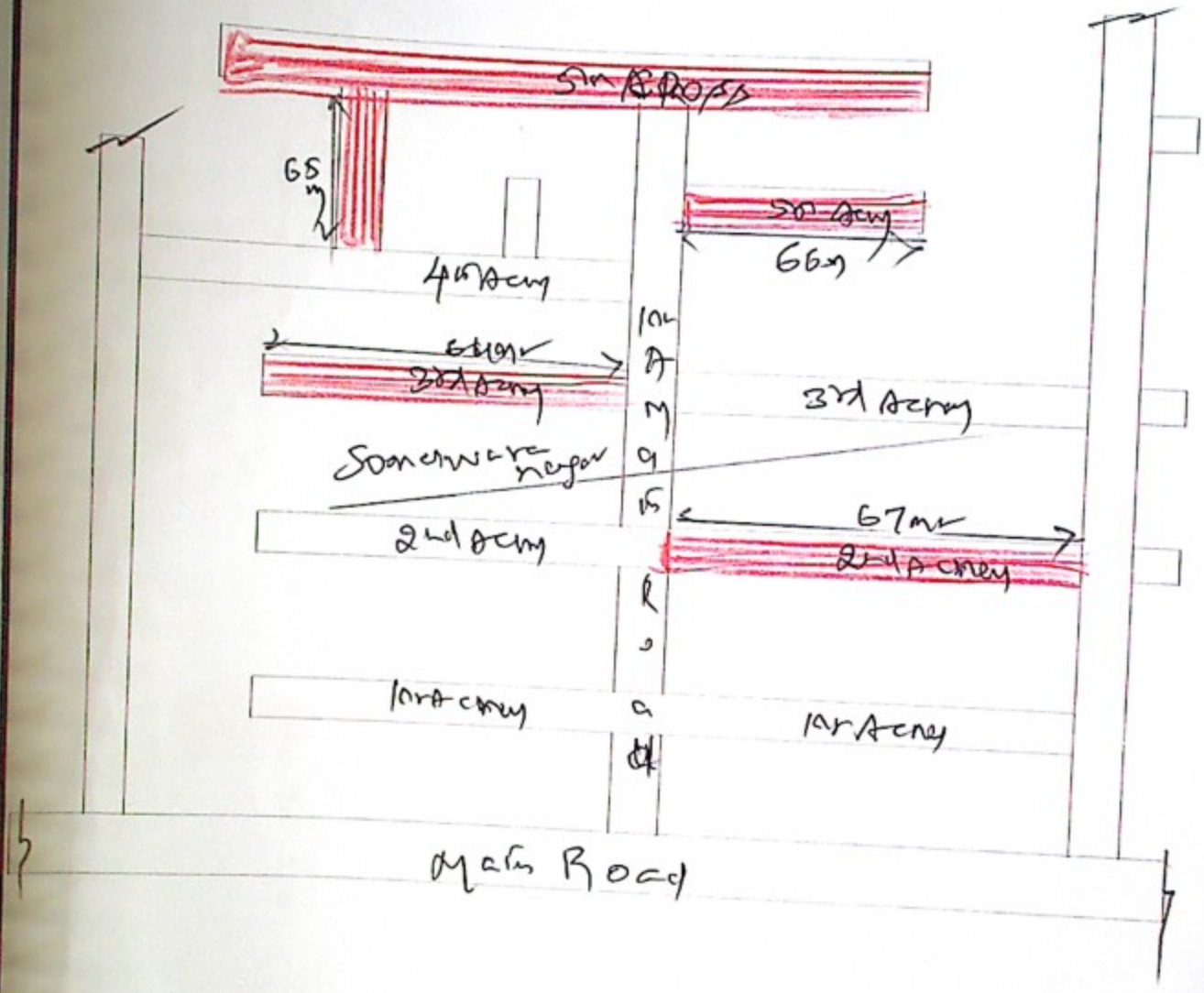
Asst. Executive Engineer
Yelahanka Sub division

Executive Engineer
Yelahanka Division

Technical Sanction
Accorded For 202-00 lakhs
Head of A/C P-3499
CER NO :125 Dt:19/10/2020

TA I GE (Y/K)

Improvements to roads and drains at Someshwara nagara in ward no -04.



INDEX:

proposed Asphalt Road

Ramanaiah

A.E.

A.E.E.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
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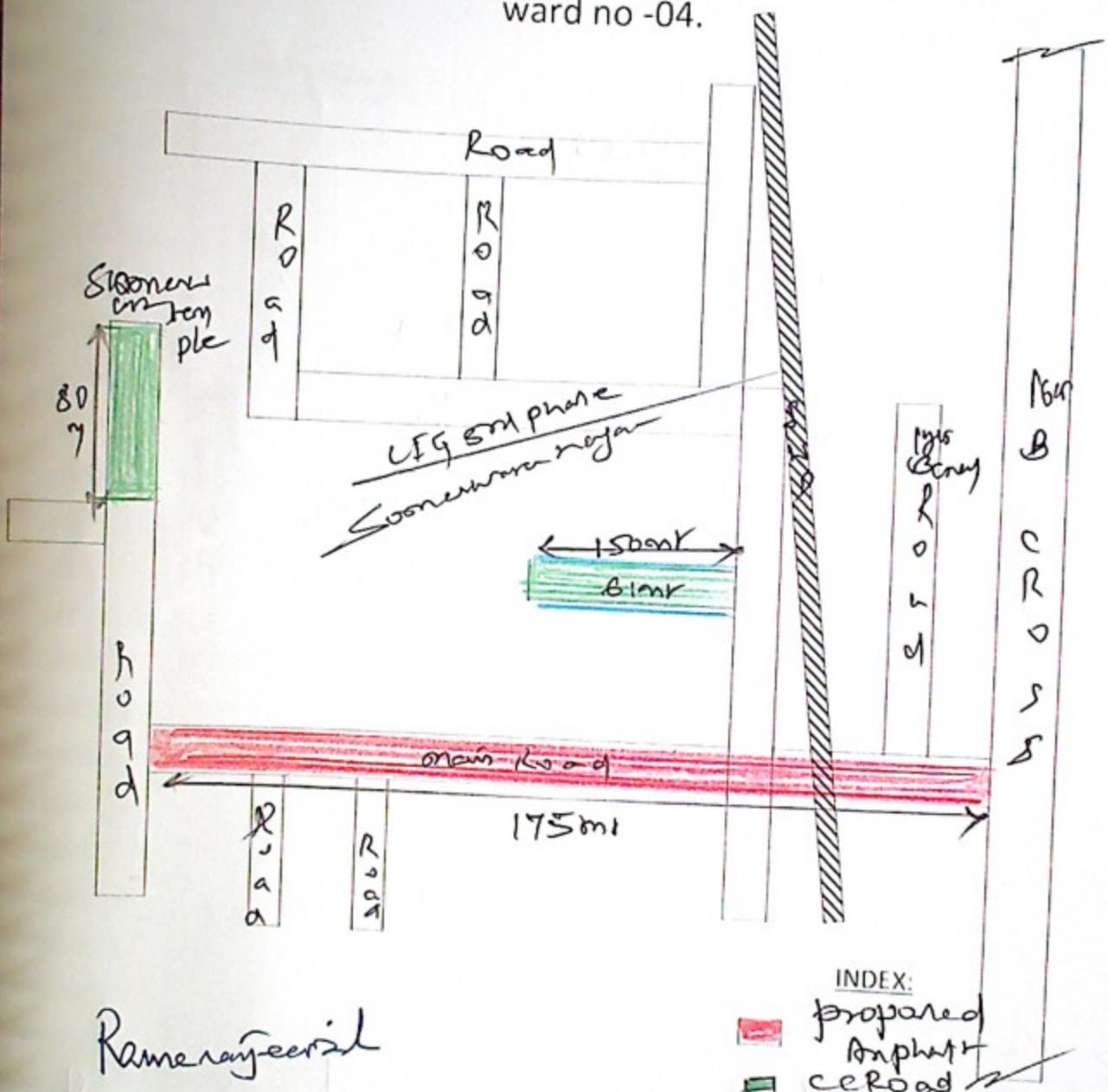
Improvements to roads and drains at Someshwara nagara in ward no -04.



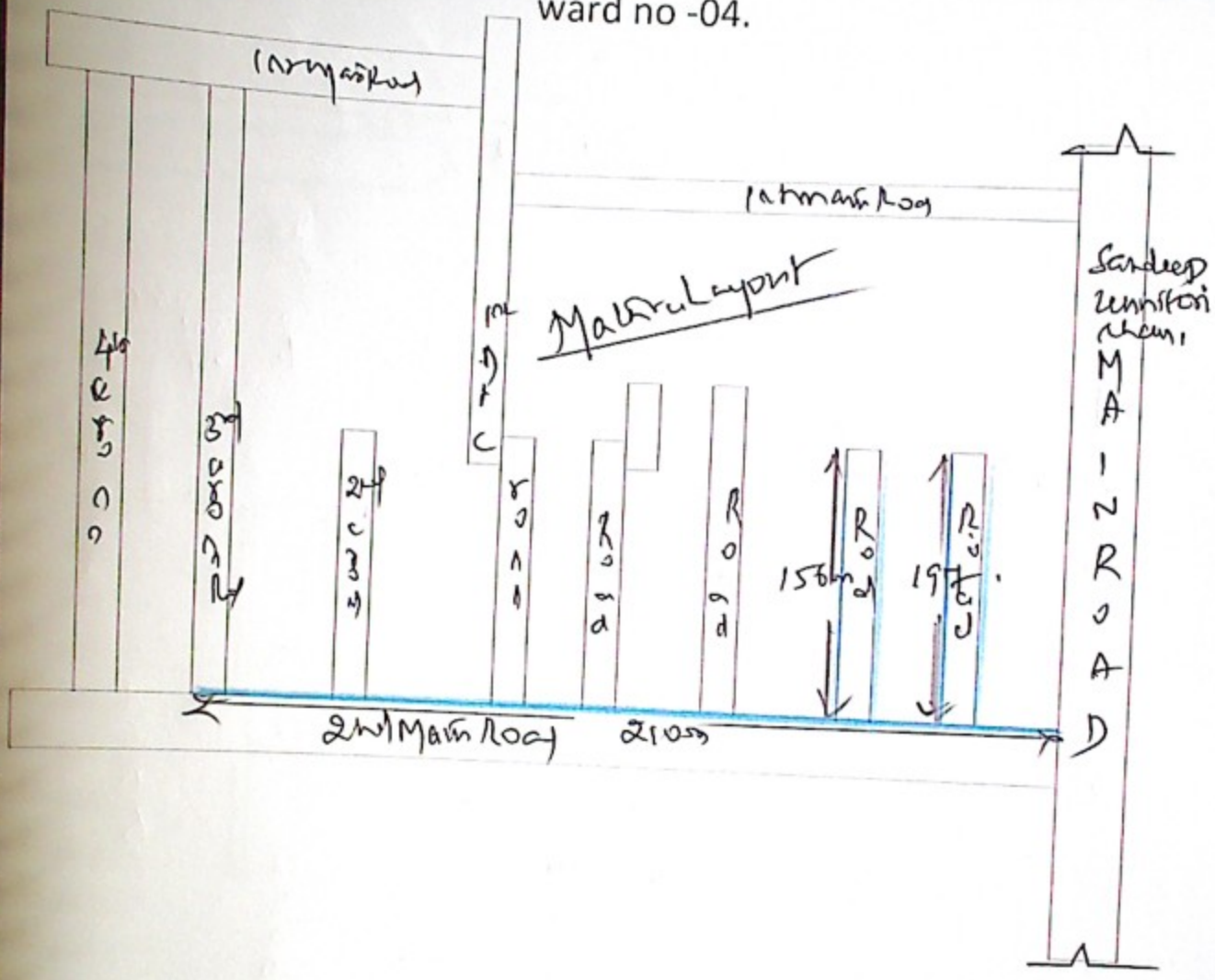
Ramanayeerish

A.E.

A.E.E.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
ಬಿ.ಡಿ.ಎ. ಬೆಂಗಳೂರು-106

Improvements to roads and drains at Someshwara nagara in ward no -04.



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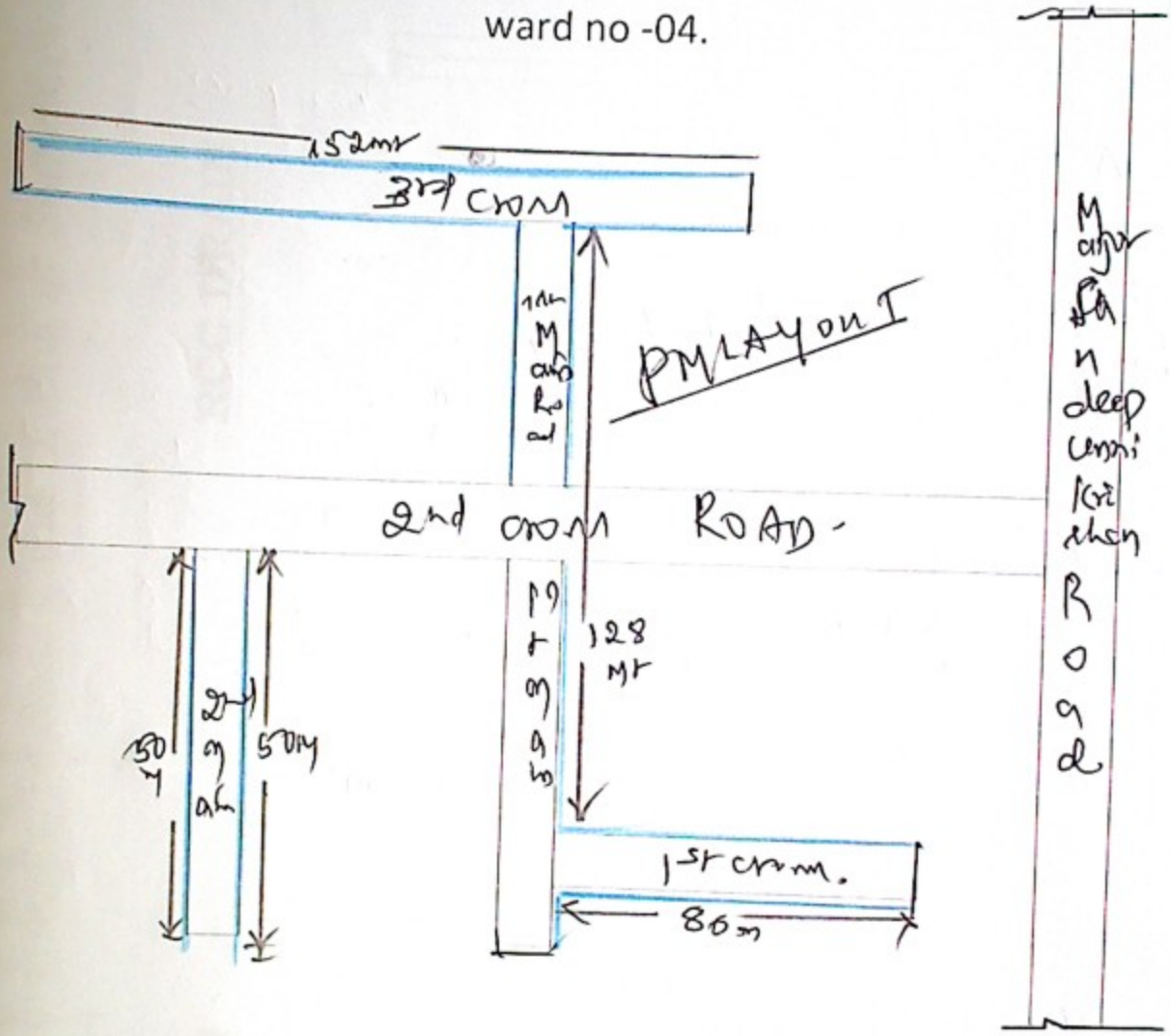
Proposed R.C.C drain

A.E.E

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

A.E.

Improvements to roads and drains at Someshwara nagara in ward no -04.



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Proposed Redrain

A.E. Ramanjaneyulu

A.E.E